UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,512	09/02/2003	Hajime Tsuchitani	JP920030118US1	3887

36380 7590 03/08/2006		

RICHARD M. GOLDMAN
371 ELAN VILLAGE LANE
SUITE 208, CA 95134

EXAMINER
HARPER, LEON JONATHAN

ART UNIT	PAPER NUMBER
2166	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	10/653,512	TSUCHITANI ET AL.
	Examiner	Art Unit
	Leon J. Harper	2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>02 September 2003</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-19</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-19</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>02 September 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☒ All   b) ☐ Some * c) ☐ None of:

      1. ☒ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3/6/06</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1. This office action is in response to application 10653512 filed on 9/2/2003.

Claims 1-19 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by US 6076088

(hereinafter Paik).

As for claim 1 Paik discloses: ontology extracting means for, based on a service

selection command from a browser, extracting an ontology corresponding to a selected

service (See column 12 lines 30-35 and see column 29 lines 10-20" showing that the

concept definition uses an ontology); storing means for analyzing the ontology extracted

by said ontology extracting means and storing into a memory a conceptual structure

and details of properties corresponding to respective concepts (See column 12 65-

column 13 lines 4); concept window display means for calling said conceptual structure

stored in said storing means and displaying it in a display area of said browser (See

figure 7 "Expansion/Clarification); and property window display means for calling from

said storing means details of a property corresponding to a concept selected from said

conceptual structure displayed by said concept window display means and displaying

them in a display area of said browser (See figure 7 "Word Senses").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paik as

applied to claim 1 above, and further in view of US 6675159 (hereinafter Lin).

As for claim 2 the rejection of claim 1 is incorporated, and further Paik differs

from the claimed invention in that wherein the conceptual structure stored in said storing

means is a conceptual tree structure taking a parent-child relationship into account. Is

not explicitly indicated. Lin however does explicitly disclose: wherein the conceptual

structure stored in said storing means is a conceptual tree structure taking a parent-

child relationship into account (See column 8 lines 56-62 and column 9 line 66- column 10 line 4). It would have been obvious to an artisan of ordinary skill in the pertinent art to have incorporated the teaching of Lin into the system of Paik. The modification would have been obvious because Paik explicitly discloses a Conceptual hierarchy (See column 10 lines 13-16): Hierarchies using inherence are best displayed and stored using trees with parent child relationships also called a "is-a" relationship.

Claims 3,4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paik as applied to claim 1 above, and further in view of US 6327586 (hereinafter Kisiel).

As for claim 3 Paik differs from the claimed invention in that a relationship input window display means for displaying in a display area of said browser a relationship input window for defining relationships between two or more concepts selected from said conceptual structure displayed by said concept window display means, or relationships between two or more properties selected from properties displayed by said property window display means is not explicitly disclosed. Kisiel however does explicitly disclose: relationship input window display means for displaying in a display area of said browser a relationship input window for defining relationships between two or more concepts selected from said conceptual structure displayed by said concept window display means, or relationships between two or more properties selected from properties displayed by said property window display means (See column 11 lines 10-

17). It would have been obvious to an artisan of ordinary skill in the pertinent art at the time the invention was made to have incorporated the teaching of Kisiel into the system of Paik. The modification would have been obvious because allowing the user to define relationships between concepts allows for the system of Paik to be used for more than a stand alone system (See Kisiel column 1 lines 35-40).

As for claim 4 the rejection of claim 3 is incorporated, and further Paik discloses: input confirmation window display means for displaying in a display area of said browser an input confirmation window for confirming information inputted using said concept (See figure 7 note" figure 7 is a review of the request and the x's allow for confirmation).

Claims 5,8-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paik in view of kisiel.

As for claim 5 Paik discloses: a vocabulary information processing mechanism for loading an ontology corresponding to a selected service and analyzing the loaded ontology to extract a conceptual structure (See column 9 lines 50-60); a conceptual information display section for displaying said conceptual structure extracted by said vocabulary information processing mechanism on a browser of a user terminal via a network (See figure 7 "Expansion/Clarification); a property information display section for displaying on said browser property information relative to a concept selected from

the conceptual structure displayed on said browser by said conceptual information display means (See figure 7 "Word Senses"). Paik differs from the claimed invention in that a relational information display section for displaying, when a plurality of concepts are selected by said conceptual information display section, relationships between the concepts on the browser is not explicitly indicated. Kisiel however does explicitly disclose: a relational information display section for displaying, when a plurality of concepts are selected by said conceptual information display section, relationships between the concepts on the browser (See column 11 lines 10-17). It would have been obvious to an artisan of ordinary skill in the pertinent art at the time the invention was made to have incorporated the teaching of Kisiel into the system of Paik. The modification would have been obvious because allowing the user to define relationships between concepts allows for the system of Paik to be used for more than a stand alone system (See Kisiel column 1 lines 35-40).

As for claim 8 the rejection of claim 5 is incorporated, and further Paik discloses: a search request transmitting section for transmitting to a search system a prescribed search request based on a search request made relative to said windows displayed on said browser by said conceptual information display section, said property information display section and said relational information display section (See column 8 lines 43-49).

As for claim 9 the rejection of claim 5 is incorporated, and further Paik discloses: an ontology search portal for calling a service selection menu list based on access made from said browser in said user terminal, displaying said service selection menu on said browser, and accessing an ontology server offering g said ontology based on service selection from said browser (See figure 7 "request Preferences" and column 18 lines 62-66 note this is just one type of mapper).

As for claim 10 Paik discloses: receiving a selection command of a service from a browser (See figure 7 "request"); extracting an ontology corresponding to said service for which the selection command is received (See figure 7 and column 18 lines 40-45); analyzing said extracted ontology and storing into a memory details of a conceptual structure and details of properties corresponding to respective concepts (See column 21 lines 7-10); calling said conceptual structure stored in said memory and displaying it in a display area of said browser (See column 21 lines 21-24); calling from said memory details of properties corresponding to concepts selected from said displayed conceptual structure and displaying them in a display area of said browser (See figure 7 "word senses"); Paik differs from the claimed invention in that displaying in a display area of said browser relational information defining relationships between said selected concepts and/or relationships between said properties is not explicitly indicated. Kisiel however does disclose displaying in a display area of said browser relational information defining relationships between said selected concepts and/or relationships between said properties (See column 11 lines 10-17). It would have been obvious to an

artisan of ordinary skill in the pertinent art at the time the invention was made to have

incorporated the teaching of Kisiel into the system of Paik. The modification would have

been obvious because allowing the user to define relationships between concepts

allows for the system of Paik to be used for more than a stand alone system (See Kisiel

column 1 lines 35-40).

As for claim 11 the rejection of claim 10 is incorporated, and further Paik

discloses: receiving an input from said browser relative to said conceptual structure,

said details of the properties and said relational information displayed in said display

areas (See figure 7 "user is selecting details); and transmitting a search request based

on said received input (See column 22 lines 19-24).

As for claim 12 the rejection of claim 11 is incorporated, and further Paik

discloses: wherein the step of transmitting said search request transmits said search

request to a search system on the Semantic Web (See column 22 lines 49-58).

As for claim 13 the rejection of claim 10 is incorporated, and further Paik

discloses: further comprising the step of extending/compressing vocabularies using an

inference engine relative to the concepts selected from said conceptual structure (See

figure 7 "expansion/Clarification" this is the expansion aspect).

As for claim 14 Paik discloses: displaying on said browser a conceptual structure based on an analysis of an ontology performed relative to service selection from said browser (See column 21 lines 7-16); displaying on said browser details of a property relative to a concept selected from said conceptual structure displayed on said browser (See figure 7). Paik however, differ from the claimed invention in that displaying, when a plurality of concepts are selected, relationships between the selected concepts on said browser is not explicitly indicated. Kisiel however does disclose: displaying, when a plurality of concepts are selected, relationships between the selected concepts on said browser (See column 11 lines 10-17). It would have been obvious to an artisan of ordinary skill in the pertinent art at the time the invention was made to have incorporated the teaching of Kisiel into the system of Paik. The modification would have been obvious because allowing the user to define relationships between concepts allows for the system of Paik to be used for more than a stand alone system (See Kisiel column 1 lines 35-40).

As for claim 15 the rejection of claim 14 is incorporated, and further Kisiel discloses: step of displaying, when a plurality of properties are inputted from said details of the property displayed on said browser, a window defining relationships between said properties on said browser (See column 11 lines 12-17).

As for claim 16 the rejection of claim 14 is incorporated, and further Paik discloses: comprising the step of displaying on said browser an input confirmation

window for confirming information inputted using respective display windows displayed

on said browser (See figure 7 note" figure 7 is a review of the request and the x's allow

for confirmation).

Claims 17-19 are program product claims corresponding to method claims 10,11,

13 respectively and are thus rejected for the same reasons set forth in the rejection of

claims 10,11,13.

Claims 6,7 rejected under 35 U.S.C. 103(a) as being unpatentable over Paik and

Kisiel as applied to claim 5 above, and further in view of Lin.

As for claim 6 the rejection of claim 5 is incorporated, and further Paik discloses:

said conceptual information display section displays on said browser a concept window

in which a prescribed concept can be selected by; said property information display

section displays on said browser a property window displaying an item for which

inputting of a property is allowed (See figure 7 currently stake is the item), said property

window enabling inputting of a restriction condition relative to said item (See figure 7

"Point in Time restriction"); and Kisiel discloses: said relational information display

section displays on said browser a relationship input window that enables inputting of a

relationship between said concepts and/or a relationship between properties selected

by said property information display section (See column 11 lines 10-17).

Paik and Kisiel differ from the claimed invention in that by tracing a tree is not explicitly indicated. . Lin however does explicitly disclose: a conceptual tree (See column 8 lines 56-62 and column 9 line 66- column 10 line 4). It would have been obvious to an artisan of ordinary skill in the pertinent art at the time the invention was made to have incorporated the teaching on Lin into the system of Paik and Kisiel the modification would have been obvious because Paik explicitly discloses a Conceptual hierarchy (See column 10 lines 13-16): Hierarchies using inherence are best displayed and stored using trees with parent child relationships also called a "is-a" relationship and tracing a tree is the fastest and most efficient way to select a concept.

As for claim 7 the rejection of claim 5 is incorporated, and further Lin discloses: n inference processing mechanism for executing an inference operation based on an axiom rule and extending/parsing vocabulary information extracted by said vocabulary information processing mechanism (See column 4 lines 60-66).

Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon J. Harper whose telephone number is 571-272-0759. The examiner can normally be reached on 7:30AM - 4:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

LJH
Leon J Harper
March 6, 2006

MOHAMMAD ALI
PRIMARY EXAMINER